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# INDUSTRY OUTLOOK

# CEMENT INDUSTRY OF INDIA: OUTLOOK AND CHALLENGES

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## Introduction

It is customarily maintained that the case for development of the cement industry in India is strong and unassailable. Let us do some number crunching to establish the significance of this industry in India: [1]
The second largest cement industry in the world, in terms of production, with over 8 per cent (502 million tonnes per annum in 2018) of the global installed capacity and generating employment for over 1 million people. 99 per cent use dry manufacturing process  and 545 million tonnes installed capacity. 20000 downstream created with each million tonne of cement manufacturing capacity.

Despite these macro-economic numbers, it is disconcerting that the demand-supply situation is highly skewed with the demand for cement far outpacing the supply of cement by a fair clip. This is starkly reflected in the fact that as against the global per capita cement consumption of 500 kg, the Indian per capita cement consumption continues to languish at less than 200 kg. Hence, while the potential for cement consumption is humungous, recent events and developments cause concern.

With the second wave of COVID-19 rapidly spreading all over the country, the manufacturing sector has been facing exacerbated pressure with the more virulent second wave. Accordingly, the manufacturing sector has been under pressure to sustain itself. This report briefly deals with the cement industry, which was relatively stable under the first wave but due to the havoc played by the second wave of Covid-19, the industry is in for difficult times.

Cement industry is an important industry in India because millions depend on it for their sustenance and livelihoods. Since cement is a freight-intensive industry, the industry is spread broadly into five regions viz., east, west, north, south and the central region, in line with the objective of balanced regional development and meet local needs. South India accounts for a larger share at 35 per cent with regional distribution being 20 per cent for North, 18 per cent for East, 14 per cent for West and 13 per cent for Central. [1]

A Working Group on Cement Industry for the Twelfth Five Year Plan constituted by the Planning commission vide Notification No. I & M – 3 (7) / 2011 dated 29th April 2011 (report submitted by December 2011), under the Chairmanship of the Secretary, Department of Industrial Policy and Promotion, held that in view of the demand and installed capacity growth projections, the additional installed capacity requirement during the next 15 years (up to 2027) would be approx. 1035 million tonnes as indicated below: [2]

## Table 1: Additional Capacity Creation (in million tonnes)

| Ending March | Base Line | Base line+ Concrete Roads | Base line+ Roads+ Housing | Base line+ Road+ Housing+ Fiscal Support | Cumulative Capacity Creation | | | |
|---|---|---|---|---|---|---|---|---|
| **Scenario** | **1** | **2** | **3** | **4** | **1** | **2** | **3** | **4** |
| 2012 | 12.9 | 12.9 | 12.9 | 12.9 | | | | |
| 2013 | 13.4 | 13.4 | 13.4 | 13.4 | 10.0 | 10.0 | 10.0 | 10.0 |
| 2014 | 13.5 | 20.2 | 23.6 | 25.3 | 23.5 | 30.2 | 33.6 | 35.3 |
| 2015 | 23.0 | 27.1 | 29.1 | 30.2 | 46.5 | 57.3 | 62.7 | 65.5 |
| 2016 | 27.2 | 31.8 | 34.3 | 35.5 | 73.7 | 89.1 | 97.0 | 101.0 |
| 2017 | 29.2 | 34.5 | 37.3 | 38.7 | 102.9 | 123.7 | 134.3 | 139.7 |
| 2022 | 249.8 | 295.1 | 319.5 | 332.1 | 352.7 | 418.7 | 453.8 | 471.9 |
| 2027 | 391.7 | 484.0 | 535.9 | 563.4 | 744.4 | 902.7 | 989.7 | 1035.3 |

Source: Report of the Working Group on Cement Industry for XII Five Year Plan:2012-2017(December2011), DIPP, Ministry of Commerce and Industry, Government of India (GoI).

The basic domestic macro-economic drivers for the cement industry in India relates to the big push to markedly upscale infrastructural facilities in the country and the nation-wide housing projects. The Committee suggested the following measures to encourage exports and support to the industry:

• Differential classification of goods for domestic and export purposes is already in vogue for iron ore, where transportation for export purposes attracts a higher classification. In case of cement, the classification for export purposes is proposed to be reduced.

• The royalty paid on lime stone should be neutralized for export of cement. This is consistent with the approach that domestic taxes are not exported.

## Global Outlook/Developments of Cement Industry

This Section provides a brief overview of the latest developments in the global cement industry. For instance, several of South Africa's cement and concrete producers joined together in early March 2021 to form an industry association called Cement & Concrete SA (CCSA). The country is also in the first phase of its carbon tax promoting the 'value creation story' of the cement and concrete industry in South Africa. Given the ongoing review of anti-dumping measures that were levied by the International Trade Administration Commission of South Africa (ITAC) upon imports by Pakistan-based cement producers,[3] the timing is crucial. Local media in South Africa reported that ITAC started reviewing the tariffs in December 2020 in a process that is expected to take up to 18 months. As reported in January 2021 (GCW 489), imports to the country fell after ITAC introduced tariffs in 2015 but they started edging up since then, particularly from producers in other countries such as Vietnam and China.

Uzbekistan has suspended tariffs on cement imports from all countries until 1 October 2021. The UzDaily newspaper has reported that the suspension is part of a raft of measures aimed at 'providing the population with housing' by bolstering construction. The measures consist of funding for multi-story housing developments, a separate trading exchange for cement and the roll-out of a new standard design for residential buildings from 1 May 2021.

Members of the European Parliament (MEP) have adopted a resolution supporting a European Union (EU) carbon border adjustment mechanism (CBAM). If enacted by the EU then a carbon tax could be levied on certain goods imported from outside the EU that don't meet local decarbonisation standards. MEPs stressed that it should be World Trade Organisation compatible and not be misused as a tool to enhance protectionism. The new mechanism is intended to be part of a broader EU industrial strategy and is expected to cover the power sector and energy-intensive industrial sectors like cement, steel, aluminum, oil refinery, paper, glass, chemicals and fertilisers, which continue to receive substantial free allocations, and still represent 94 per cent of EU industrial emissions. [4]

In US, domestic consumption fell by less than one per cent to 102Mt from 103Mt during March 2021. Cement imports totalled 15.0Mt, up slightly from 14.7Mt, while clinker imports rose to 1.4Mt from 1.2Mt. This corresponded to a 15% rise in reliance on imports of cement and clinker. The main exporters of cement and clinker to the country were Canada, accounting for 33 per cent of US imports, Turkey (16 per cent), Greece (15per cent) and China (12 per cent). [5]

### Table 2: Performance of Eight Core Industries Yearly Index & Growth Rate (Base Year: 2011-12=100) Index

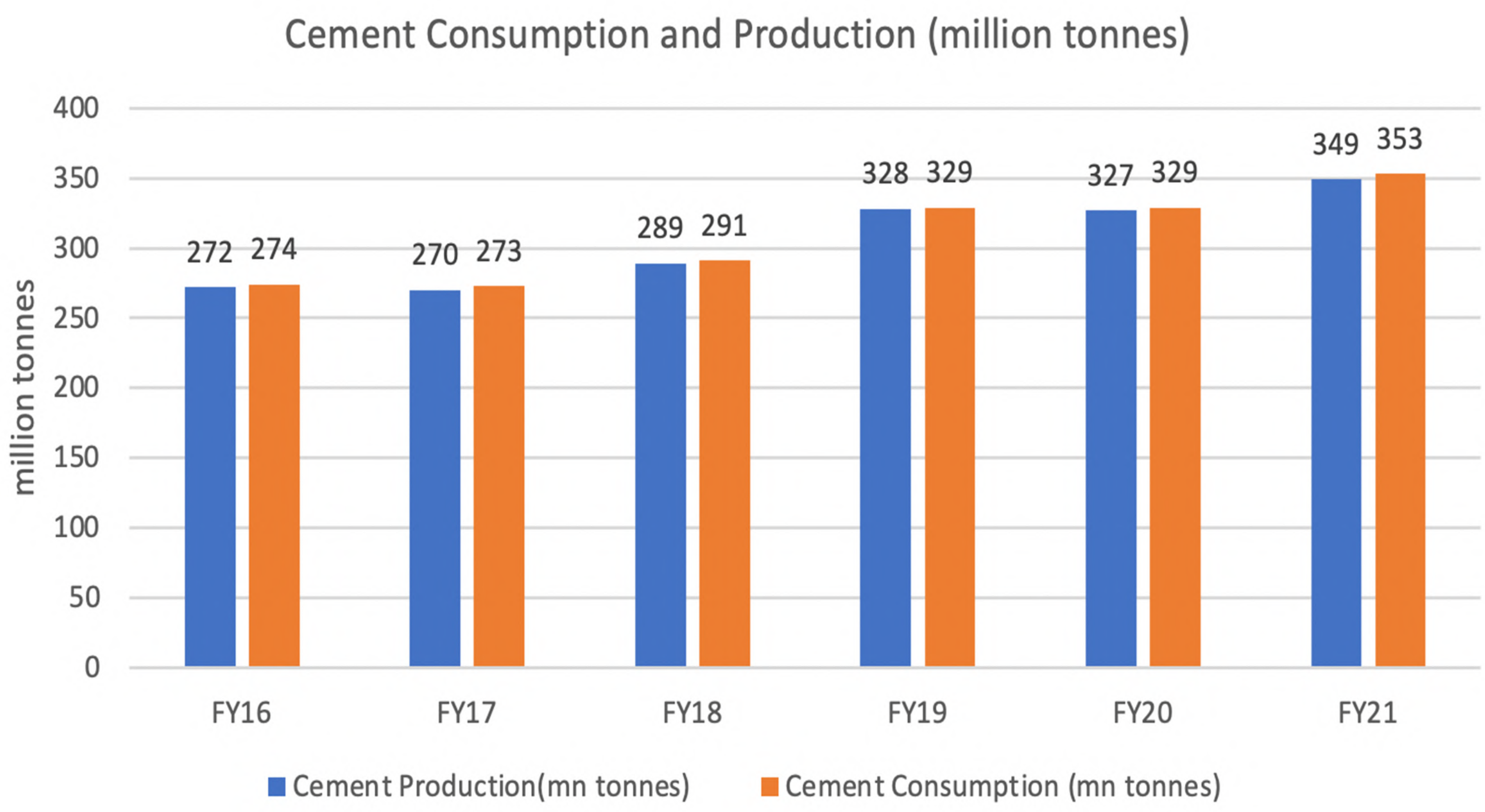
| Sector | Weight | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21* (April to March) |
|---|---|---|---|---|---|---|---|---|---|---|
| Coal | 10.3335 | 103.2 | 104.2 | 112.6 | 118.0 | 121.8 | 124.9 | 134.1 | 133.6 | 127.3 |
| Crude Oil | 8.9833 | 99.4 | 99.2 | 98.4 | 97.0 | 94.5 | 93.7 | 89.8 | 84.5 | 80.1 |
| Natural Gas | 6.8768 | 85.6 | 74.5 | 70.5 | 67.2 | 66.5 | 68.4 | 69.0 | 65.1 | 59.8 |
| Refinery Products | 28.0376 | 107.2 | 108.6 | 108.8 | 114.1 | 119.7 | 125.2 | 129.1 | 129.4 | 114.9 |
| Fertilizers | 2.6276 | 96.7 | 98.1 | 99.4 | 106.4 | 106.6 | 106.6 | 107.0 | 109.8 | 111.8 |
| Steel | 17.9166 | 107.9 | 115.8 | 121.7 | 120.2 | 133.1 | 140.5 | 147.7 | 152.6 | 138.1 |
| Cement | 5.3720 | 107.5 | 111.5 | 118.1 | 123.5 | 122.0 | 129.7 | 147.0 | 145.7 | 128.3 |
| Electricity | 19.8530 | 104.0 | 110.3 | 126.6 | 133.8 | 141.6 | 149.2 | 156.9 | 158.4 | 157.5 |
| **Overall Index** | **100.00** | **103.8** | **106.5** | **111.7** | **115.1** | **120.5** | **125.7** | **131.2** | **131.6** | **122.5** |

Source: Press Release by the Office of the Economic Adviser (30 April 2021), DIPP, GoI; https://eaindustry.nic.in/eight_core_infra/Eight_Infra.pdf

## The Cement Production and Export-Import Trends in India

From the Office of the Economic Adviser latest April 2021 data, it can be observed that cement with a weight of 5.37 in eight core industries, has an index of 128.3 during April-March, 2021; when it moderately declined to 145.7 in 2019-20 from 147.0 in 2018-19. However, it improved substantially since 2016-17. The following Chart (Chart 1) shows that the cement production has declined marginally, which is clearly a consequence of the Covid-19 pandemic, whereas consumption remains flat. The estimated production of FY21 portrays a more optimistic scenario. It will, however, depend in no small measure on the timely containment of the pandemic.

### Figure 1: Cement Consumption and Production in India (million tonnes)

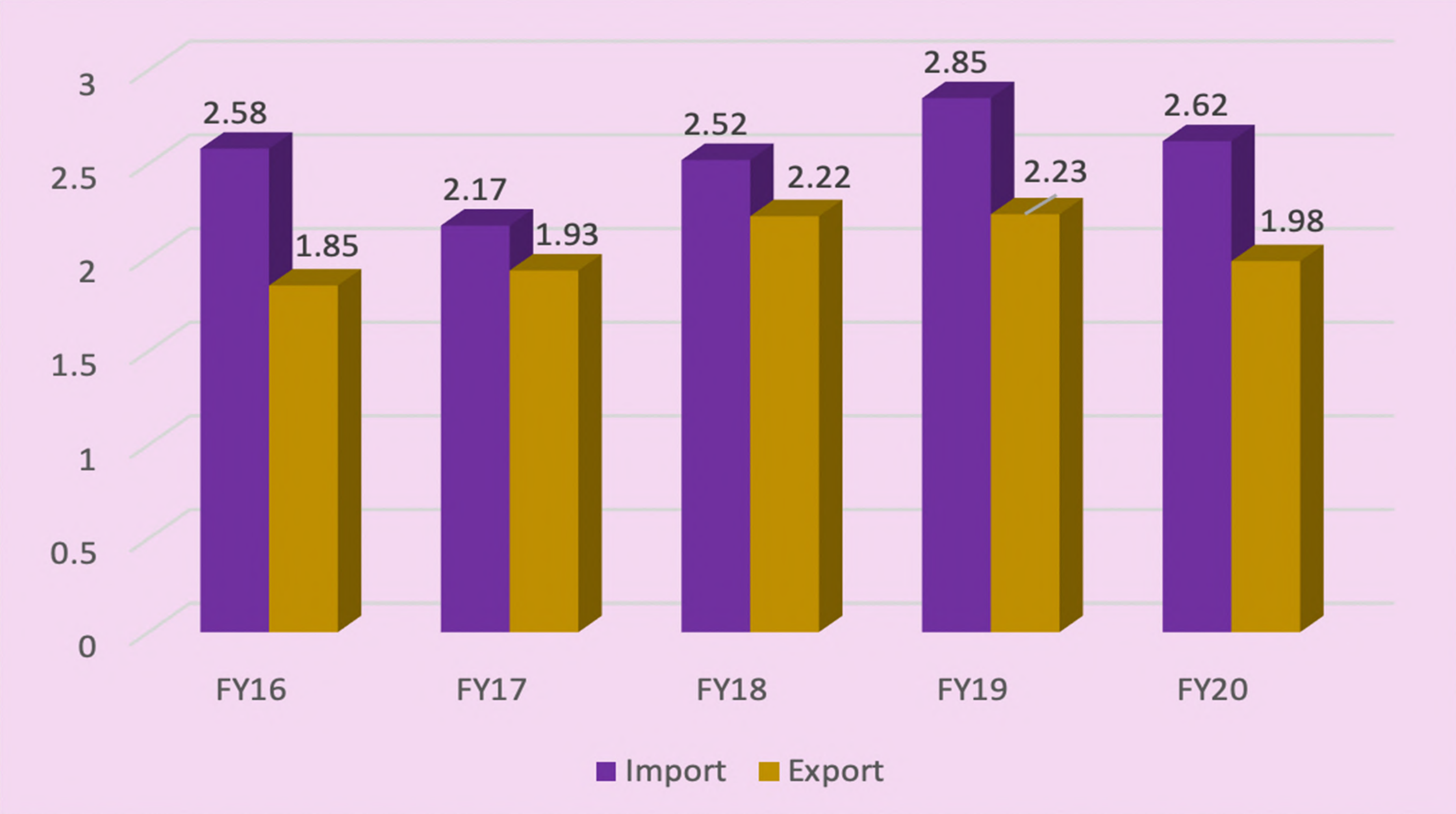



Source: India Brand Equity Foundation (7 May 2021) https://www.ibef.org/industry/cement-presentation;
Note: FY21 figures are Estimated (E).

In the aftermath of the Covid-19 pandemic, global trade received a severe drubbing. Earlier in 2019, the global merchandise trade volume declined due to trade tensions and decelerated economic growth. With the easing of the lockdown across the globe (except certain countries like India, where the second wave of the pandemic wrought havoc) the WTO estimates trade volume growth to rebound to 7.2 percent in 2021,[6] but will remain well below the pre-crisis trend. Further, the recovery in 2021 is function of a variety of forces and factors, which include, inter-alia, the duration and the spatial distribution of the outbreak and the effectiveness of the policy responses.

An interesting aspect amid the deadly second wave of the pandemic is that India's order booking position of exporters remains reasonably alright (14 May 2021, FIEO Press Release) [7] and the expected gradual improvement in the country, will provide a further impetus to the process of exports growth.

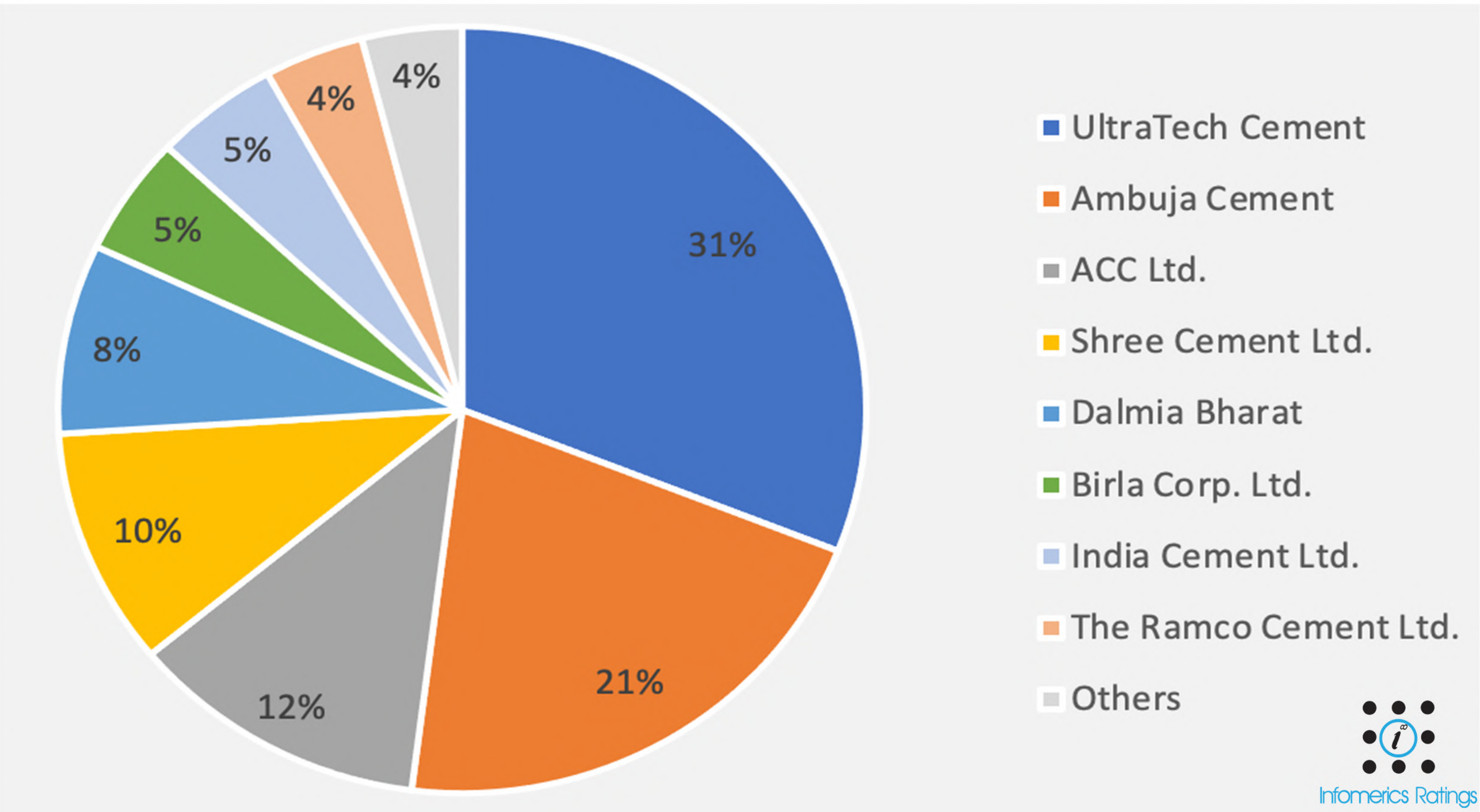
The Figure 2 clearly brings out that imports have always outstripped exports, with compound annual growth rate (CAGR) being 1.68 per cent for exports and 0.42 per cent for imports. It gives the import-export data for the industry.




Source: IBEF, 2021. * - incl. cement, clinker and asbestos cement.

## Major players in Cement Industry

The Indian cement industry reveals a skew inasmuch as the industry is dominated by a few companies and an important role of the regional players, rather than national ones. Given the very nature of this product of being a bulk commodity and therefore freight-intensive, transportation over the haul pushes up the cost and could even make it unviable. The key determinant influencing the three categories of cement companies relates to quality and price. What makes cement different from other products is that the difference between a good and a not-so-good cement is not clearly discernible to the final consumer in the initial construction phase and the full impact of the quality of the cement kicks in only with a lag. The figure below (Figure 3) gives the market share of the top cement producers.



This explains the proliferation of several low-priced cement companies, which unlike the established players, do not adequately focus on the quality and lack automated systems for periodic quality tests. It is not always realized-much less felt-that such short-sighted myopic decisions aimed at cutting the corners and reducing costs can have a deleterious impact on the long-run in terms of the durability and the maintenance cost of the constructed structure.

The top 20 cement companies account for almost 70 per cent of the total cement production in the country. A total of 210 large cement plants account for a cumulative installed capacity of over 410 MT, with 350 small plants accounting for the rest. Of these 210 large cement plants, 77 are in the states of Andhra Pradesh, Rajasthan and Tamil Nadu.

## Recent investments and potential investments by major players are listed below.

• In January 2021, ACC Ltd. commissioned its new grinding unit at Sindri, in Dhanbad District of Jharkhand, adding an incremental capacity of 1.4 million tonnes per annum (MTPA) to the existing 3 MTPA unit. In February 2021, the company announced the groundbreaking ceremony of its greenfield project of 2.7 MTPA integrated cement plant with 1 MTPA cement grinding unit at Ametha in Kymore, Madhya Pradesh.

• Heidelberg Cement, a Germany-based cement manufacturer, has commissioned Phase-I of its Jhansi grinding unit. The company has undertaken an investment worth US$ 259.4 million for expanding its capacity to 2.9 MT.

• In November 2020, Ramco Cements Ltd. acquired an additional stake worth ₹2.48 crore in Lynks Logistics.

• In October 2020, Dalmia Bharat Group announced plans to invest about ₹2,000 crore (US$ 270.44 million) for setting up a cement plant in Kalaburgi, Karnataka. In November 2020, Dalmia Cement signed a contract with Paytm for digitising its payment processes. Paytm sought to help customers purchase Dalmia Cement products from more than 30,000 dealers and distributors across 22 Indian states and union territories using Paytm Wallet, Unified Payments Interface (UPI) and other cashless modes of payment.[8] In December 2020, Dalmia Cement announced a capacity addition of 2.3 MTPA at its Bengal Cement Works (BCW) unit in West Midnapore with an investment of ₹360 crores.

• In November 2020, Shiva Cement Ltd., a subsidiary of JSW Cement Ltd., had announced plans to invest over ₹1,500 crore in a new 1.36 MTPA clinker unit project in Odisha.

• In December 2020, UltraTech Cement planned to invest ₹5,477 crore to raise the capacity by 12.8 MTPA. The expansion includes existing approval for the cement plant at Pali in Rajasthan, in addition to capacity expansion of 6.7 MTPA currently underway in Uttar Pradesh, Odisha, Bihar and West Bengal.

• In January 2021, Star Cement announced its plan to invest US$ 137 million (roughly ₹1,000 crore) to increase production capacity of its integrated cement plant in Guwahati, Assam, by 2 MTPA.

## Government Initiatives

The Government of India has been keen to foster sustained growth of this industry with significant multiplier effects thus influencing growth, structural transformation, inequality and distributive equity. Accordingly, in terms of the latest (2021-22) Union Budget, large amounts were allocated to various sectors, construction being one of them. The important thrust to infrastructural development e.g., making 100 smart cities, expanding the capacity of the railways, upgrading 1,25,000 km of road length over the next five years and increasing the facilities for storage and handling of goods to reduce transportation costs and important initiatives such as 'Housing for All' and 'Smart Cities Mission' augur well for the cement industry. A further impetus is expected to be provided by the construction of cement concrete roads and highways through the Bharatmala Project, construction of rural roads under the Pradhan Mantri Gram Sadak Yojana, metro rail networks across cities, bullet train and the ascendancy of the middle class in India with attendant implications for the housing sector, which is expected to grow at 6 per cent per annum' through the PPP model (Public Private Partnership).

Consequently, the per capita cement consumption in the country is expected to surge from 225 kg in 2018 to 435 kg by 2030 with the national demand for cement estimated at 365 MMT.

The government allocated 34.5 per cent more in 2021-22 Budget (Budget Estimate) than last year to infrastructure development and given equal emphasis to all physical infrastructure including roads and highways, railways, urban infrastructure, power, port, shipping and airways, and petroleum and natural gas. The Budget allocated ₹1,18,101 crore, the highest ever outlay, for Ministry of Road Transport and Highways, of which ₹1,08,230 crore is for capital expenditure. Under the Bharatmala Pariyojana, with an estimated investment of ₹5.35 lakh crore, a network of 13,000 km of roads worth ₹3.3 lakh crore has already been awarded for construction.

Moreover, projects amounting to ₹78,910 crore have been grounded under Atal Mission for Rejuvenation and Urban Transformation (AMRUT), under which work worth ₹47,703 crore have been carried out including completed projects worth ₹16,449 crore.

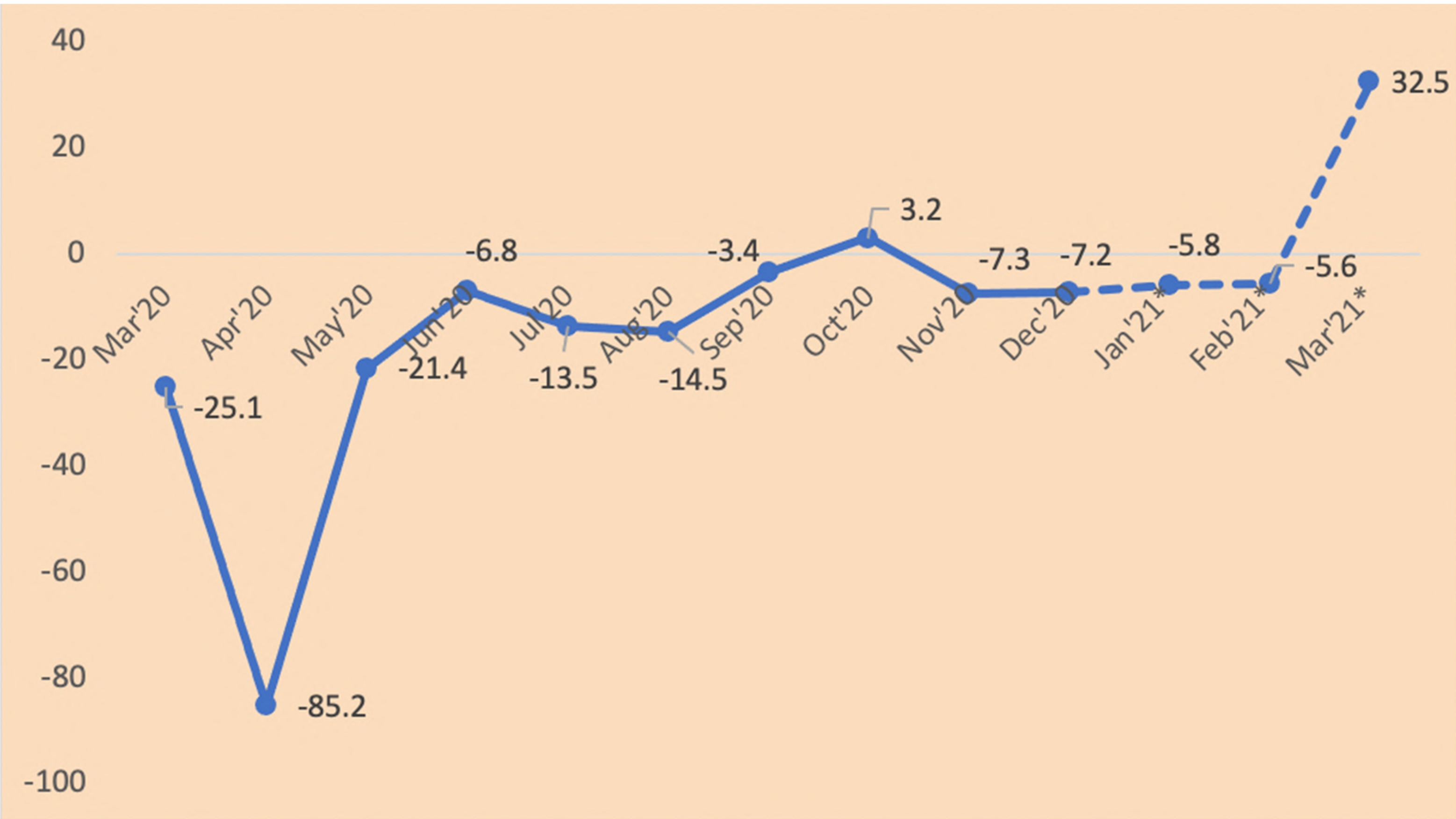
Coming to Pradhan Mantri Awas Yojana – Urban (PMAY-U), construction of 1,68,606 new houses have been approved in the 52nd Central Sanctioning and Monitoring Committee meeting under PMAY-U held in Jan'21 taking the total tally of approved houses to 1.1 crore till Jan'21 which was followed by approving construction of 56,368 houses at 53rd Meeting held in Feb'21. Further, the government is giving utmost priority to the development of infrastructure and has set a target of road construction of worth ₹15 lakh crore in next two years, according to a press release in 1st May 2021. Further, the Government of India has extended the benefits under Section 80 - IBA of the Income Tax Act till March 31, 2022 to promote affordable housing in India in the Budget 2021-22.

The Union Budget's accent on spurring investment and bringing about greater social inclusion contained measures to operationalise the National Infrastructure Pipeline by creating an institutional structure to facilitate infrastructure financing; monetising assets; and enhancing share of capital expenditure would help the sector move up the value chain and make it more profitable. Further, development of roads and highway infrastructure; the national highway corridors; commissioning of eastern and western Dedicated Freight Corridors (DFCs); strengthening of rural infrastructure development fund; and infrastructure financing through Zero Coupon Bonds, boosting affordable housing through an extension in tax holiday till March 31, 2021 are welcome. Rationalisation of regulatory compliance mechanism and measures aimed at improving ease of doing business would also be helpful in salubrious development of the sector.

## Industry Risk

The biggest challenge that the industry as well as the Indian economy is currently facing is the catastrophic impact of the second wave of the COVID-19 pandemic, which poses huge uncertainty. What makes matters worse is the distinct possibility of a third wave with debilitating impact not just across the sector but also the larger national economy. The pandemic has brought about both demand side and supply side challenges for the industry. The demand side being lack of demand for housing sector and delayed infrastructure projects, while the supply side being disrupted transportation and labour shortages. The figure below (Figure 4) gives the month-on-month growth rate for the pandemic period. It can be seen clearly that the lockdown entailed a negative growth of as high as 85 per cent with a positive growth of about 3 per cent in the 'unlock' period. But this positive growth was witnessed for just one month (Oct'20) and the sector again slumped into negative digits. The provisional data expects the sector to grow at a highly optimistic rate of 32 per cent for Mar'21, but the second wave certainly makes things difficult and the realization of such optimistic prospects are fraught with risk because of the evolving circumstances.

### Figure 4: Month-on-Month Growth Rate of Cement (%) in India

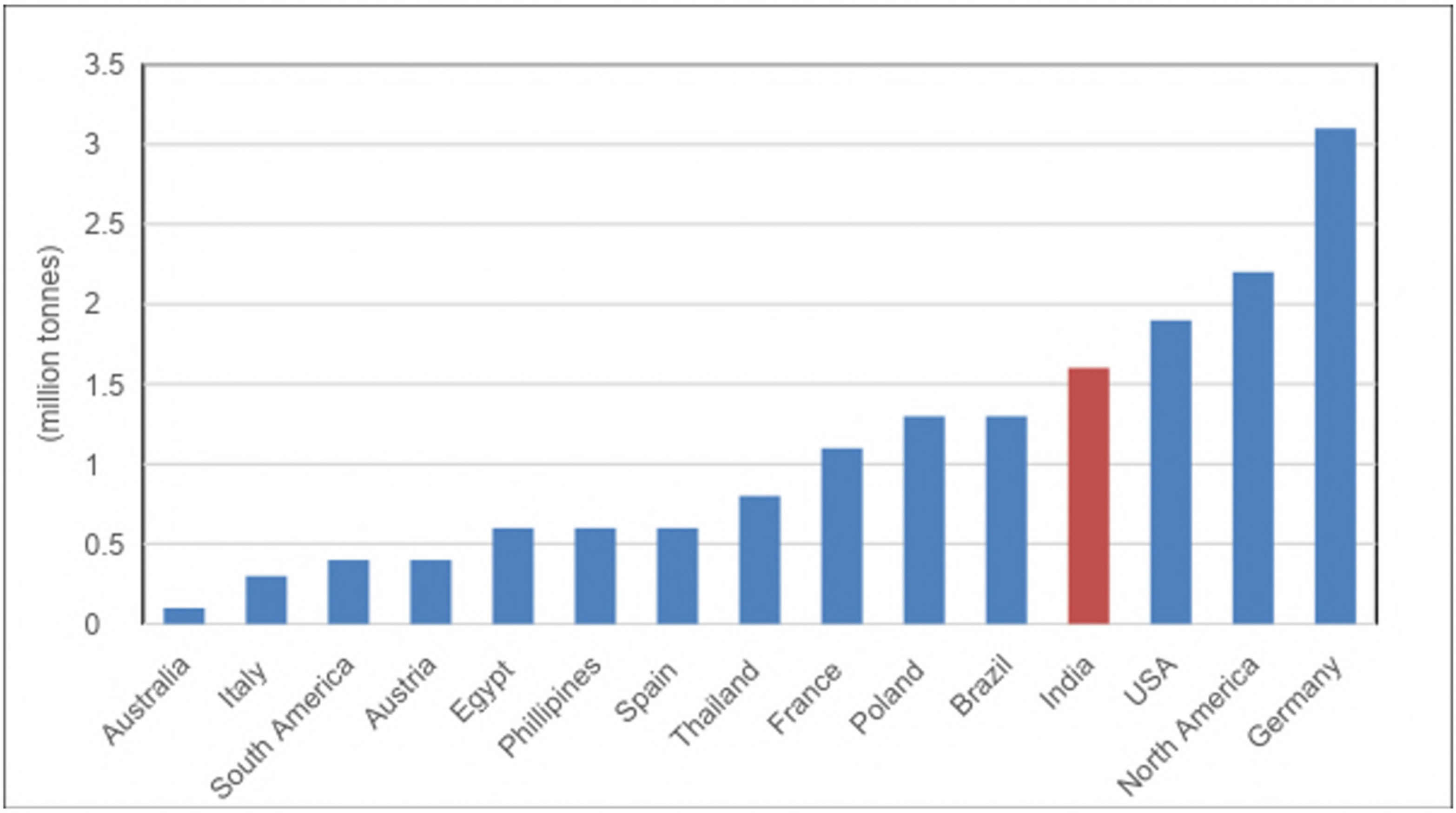



Source: Office of Economic Adviser, Press Release 30th April 2021. Available at https://eaindustry.nic.in/eight_core_infra/Eight_Infra.pdf

Headwinds in terms of project execution relate to the present COVID situation, and committing to fresh capex during this time would need greater clarity depending on the further impact of COVID. [9] This year's impact could be aggravated with disrupted supply chain, labour shortage, drying of cash flows and many of the projects getting halted or delayed. As major input materials like coal, pet coke, diesel, etc. are on the rise, the cost of cement manufacturers has also increased, resulted in higher costs of cement. In view thereof, the future of the Indian cement industry is inextricably linked to the evolving macro-economic landscape including how the COVID 19 scenario in the country pans out.

With high and mounting concerns of environmental pollution and the compelling need to promote sustainable development, there has been an emphasis on reducing the sectoral energy footprint. The industry accomplished 0.815 million tonnes of oil equivalent (mtoe) with 1.48mtoe, higher by almost 82% during PAT Cycle I in India's Bureau of Energy Efficiency's (BEE) Perform, Achieve and Trade (PAT) scheme. [10]

## Figure 5: Country wise Alternative Fuel Utilisation




Source: Cement Sustainability Initiative; https://www.cmaindia.org/key-areas/environment/

Apart from increased use of Alternative Fuel and Raw Materials (AFR) and Waste Heat Recovery through cogeneration, adopted renewable energy, and substituted clinker with fly ash and slag, most Indian cement plants are based on dry cement manufacturing technology and is a zero-waste water industry. Such efforts need to be made sustainable over the long haul to address emerging global and national environmental concerns.

## The Way Forward

It has to be realized that the budget allocation is a part of the story and not the story itself. In other words, the budget allocation is a necessary but, by no means, a sufficient condition. Accordingly, in the present phase, Higher spending is necessary for the government to address virus and growth concerns. This is why it is important to ensure that the allotted budget is used judiciously and in an effective manner so that excess capacities are utilized, and livelihoods are ensured.

The industry expects a major rebound from the government projects [11] to provide the much-needed multiplier impact, create productive employment, enhance the standard of living and consolidate India's position in the comity of nations. But in the ultimate analysis, there is no substitute to enhanced productivity while simultaneously decreasing costs. Given the heightened environmental concerns of this sector, there has to be a renew thrust on high-performance energy-efficient products with maximum availability and flexibility. These products also need to comply with environmental regulations while providing maximum safety for employees, machines and material.

A seamless integration of innovative solutions along the entire production chain requires electrification, automation, and digitalization of core production and secondary processes across the entire spectrum from system solutions up to completely integrated electrical installations. This is a tall order but certainly doable. Toward this end, there has to be synchronized efforts by all stakeholders, including the firms and industry itself to discernibly alter the ground-realities and get these projects up and running quickly to avoid further disruptions together with resuming the stalled projects with a sense of urgency.

## ENDNOTES

1. https://www.cmaindia.org/cement-industry/infographics/
2. https://www.ibef.org/industry/cement-presentation (May 2021)
3. https://www.financialexpress.com/opinion/union-budget-2021-infrastructure-clearly-the-focus-area-in-the-budget/2190720/
4. https://pib.gov.in/PressReleasePage.aspx?PRID=1697133
5. https://pib.gov.in/PressReleasePage.aspx?PRID=1690709
6. https://pib.gov.in/PressReleasePage.aspx?PRID=1700118
7. PIB Press Release (1st May 2021) https://pib.gov.in/PressReleasePage.aspx?PRID=1715241
8. https://housing.com/news/section-80iba-proposed-changes-in-budget-2019-and-benefits-to-affordable-housing-developers/#:~:text=Section%2080IBA%20of%20the%20Income%20Tax%20Act%20entitles%20the%20developers,the%20project%20meets%20certain%20conditions.
9. https://realty.economictimes.indiatimes.com/news/allied-industries/fresh-capex-will-need-clarity-over-covid-impact-dharmender-tuteja-cfo-dalmia-bharat/82545884
10. Home page of the Cement Manufacturers Association (CMA).
11. https://realty.economictimes.indiatimes.com/news/allied-industries/fresh-capex-will-need-clarity-over-covid-impact-dharmender-tuteja-cfo-dalmia-bharat/82545884
12. https://www.moneycontrol.com/news/business/lockdown-forces-sharp-fall-in-cement-demand-signals-slowdown-in-construction-activity-6855031.html

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